DEPARTMENT OF TRANSPORTATION SERVICES

MUFI HANNEMANN
MAYOR

CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 3RD FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 768-8305 • Fax: (808) 768-4730 • Internet: www.honolulu.gov

WAYNE Y. YOSHIOKA
DIRECTOR

SHARON ANN THOM
DEPUTY DIRECTOR

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Ms. Kim Kido
Sierra Club, Oahu Group
P.O. Box 2577
Honolulu, Hawaii 96803

Dear Ms. Kido:

Subject: Honolulu High-Capacity Transit Corridor Project
Comments Received on the Draft Environmental Impact Statement

The U.S. Department of Transportation Federal Transit Administration (FTA) and the City and County of Honolulu Department of Transportation Services (DTS) issued a Draft Environmental Impact Statement (EIS) for the Honolulu High-Capacity Transit Corridor Project. This letter is in response to substantive comments received on the Draft EIS during the comment period, which concluded on February 6, 2009. The Final EIS identifies the Airport Alternative as the Project and is the focus of this document. The selection of the Airport Alternative as the Preferred Alternative was made by the City to comply with the National Environmental Policy Act (NEPA) regulations that state that the Final EIS shall identify the Preferred Alternative (23 CFR § 771.125 (a)(1)). This selection was based on consideration of the benefits of each alternative studied in the Draft EIS, public and agency comments on the Draft EIS, and City Council action under Resolution 08-261 identifying the Airport Alternative as the Project to be the focus of the Final EIS. The selection is described in Chapter 2 of the Final EIS. The Final EIS also includes additional information and analyses, as well as minor revisions to the Project that were made to address comments received from agencies and the public on the Draft EIS. The following paragraphs address comments regarding the above-referenced submittal:

Connectivity

As shown in Table 3-20, Daily Mode of Access to Project Stations—2030, in this Final EIS, 90 percent of fixed guideway riders will walk, bike, or take a bus to reach the stations, while the remaining 10 percent of riders will drive to park-and-ride facilities or be dropped off.

As stated in Section 2.5.5, Pedestrian and Bicycle Access, of this Final EIS, design criteria developed for stations place the highest emphasis on walk and bicycle access. Pedestrian access to stations, including accessible routes, will be given first priority for reasons of safety. The design criteria also state that, as a non-motorized mode, bicycles will be given second priority in terms of station access.

As indicated in Section 4.6.3, Environmental Consequences and Mitigation [Neighborhoods], of this Final EIS, ongoing coordination efforts with the public will help develop design measures that will enhance the interface between the transit system and the surrounding community. The extent, nature, and location of these design measure will be determined through these coordination efforts. DTS is working with other City Departments and the Hawaii Department of Transportation to provide adequate facilities for all access modes and to encourage the development of pedestrian and bicycle improvements near stations to coincide with the Project.

Rail vehicles will be designed to accommodate bicycles, luggage, and surfboards that do not interfere with the safety or comfort of other passengers, to be regulated according to a policy to be developed.

Several stations will be at or near existing or planned bicycle facilities. Section 3.4.2, Effects on Transit, of this Final EIS states, "Each station will have facilities for parking bikes, and each guideway vehicle will be designed to accommodate bicycles... Sidewalks and crosswalks are currently available at stations or will become available as streets and sidewalks are built in developing areas. At many stations, the Project will add new sidewalks or widen or otherwise improve existing ones." While the Project is coordinating with City and State agencies to encourage development of enhanced pedestrian and bicycle facilities near stations, the actual construction of such facilities is beyond the scope of the Project.

In addition, at the Pearl Highlands Station, pedestrian bridges will connect station entrance with nearby residential and commercial areas. The East Kapolei Station will include an enhanced pedestrian link between the park-and-ride facility and station entrances. For the Honolulu International Airport Station, pedestrian walkways will connect the Station to the Interisland and Overseas Terminals.

Aesthetics and Viewplanes

DTS has developed design criteria to address the City's requirements for the Project. Guideway materials and surface textures will be selected in accordance with generally accepted architectural principles to integrate the guideway with its surrounding environment.

As stated in Section 2.2 of the Final EIS, prior to selecting an elevated fixed guideway system, a variety of high-capacity transit options were evaluated during the Primary Corridor Transportation Project (1998—2002) and Alternatives Analysis. Options evaluated and rejected included an exclusively at-grade fixed-guideway system using light-rail or bus rapid transit (BRT) vehicles, as well as a mix of options consisting of both at-grade and grade-separated segments.

The Alternatives Screening Memorandum (DTS 2006a) recognized the visually sensitive areas in Kakaako and Downtown Honolulu, including the Chinatown, Hawaii Capital, and Thomas Square/Academy of Arts Special Design Districts. To minimize impacts on historic resources, visual aesthetics, and surface traffic, the screening process considered 15 different combinations of tunnel, at-grade, or elevated alignments between Iwilei and Ward Avenue. Five different alignments through Downtown Honolulu were advanced for further analysis in the Alternatives Analysis, including an at-grade portion along Hotel Street, a tunnel under King Street, and elevated guideways along Nimitz Highway and Queen Street.

The Alternatives Analysis Report (DTS 2006b) evaluated the alignment alternatives based on transportation and overall benefits, environmental and social impacts, and cost considerations. The report found that an at-grade alignment along Hotel Street would require the acquisition of more parcels and affect more burials than any of the other alternatives considered. The alignment with at-grade operation Downtown and a tunnel through the Capital Historic District, in addition to the environmental effects such as impacts to cultural resources, reduction of street capacity, and property acquisition requirements of the at-grade and tunnel sections, would cost more than $300 million more than the least expensive alternative.

The Project's purpose is "to provide high-capacity rapid transit" in the congested east-west travel corridor. The need for the Project includes improving corridor mobility and reliability. The at-grade alignment would not meet the Project's Purpose and Need because it could not satisfy the mobility and reliability objectives of the Project. Some of the technical considerations associated with an at-grade versus elevated alignment through Downtown Honolulu include the following:

- ***System Capacity, Speed, and Reliability:*** *The short, 200-foot blocks (or less) in Downtown Honolulu would permanently limit the system to two-car trains to prevent stopped trains from blocking vehicular traffic on cross-streets. Under ideal circumstances, the capacity of an at-grade system could reach 4,000 passengers per hour per direction, assuming optimistic five minute headways. Based on travel forecasts, the Project will need to carry approximately 8,000 passengers by 2030. Moreover, the system can be readily expanded to carry over 25,000 in each direction by reducing the interval between trains (headway) to 90 seconds during the peak period. To preserve a comparable system capacity, speed, and reliability, an at-grade alignment would require a fenced, segregated right-of-way that would eliminate all obstacles to the train's passage, such as vehicular, pedestrian, or bicycle crossings. Even with transit signal priority, the at-grade speeds would be slower and less reliable than an elevated guideway. At-grade system would travel at slower speeds due to the shorter blocks, tight and short radius curves in places within the constrained and congested Downtown street network, the need to obey traffic regulations (e.g., traffic signals) along with other vehicles, and potential conflicts with other at-grade activity such as cars, bicyclists, and pedestrians. These effects mean longer travel times and far less reliability than a fully grade-separated system. None of these factors affect an elevated rail system. The elevated rail can travel at its own speed any time of the day regardless of weather, traffic or the need to let cross traffic proceed at intersections.*

- ***Mixed-Traffic Conflicts****: With the planned three-minute headways, the short cycle of traffic lights would affect traffic flow and capacity of cross-streets. Furthermore, there would be no option to increase the capacity of the system by reducing the headway to 90 seconds. An at-grade system would also require removal of two or more existing traffic lanes on affected streets. This effect is significant and would exacerbate congestion for those who choose to drive.*

Congestion would not be isolated to the streets that cross the at-grade alignment but instead would spread throughout Downtown. The Final EIS shows that the Project's impact on traffic will be isolated and minimal, and in fact will reduce system-wide traffic delay by 18 percent compared to the No Build Alternative (Table 3-14 in the Final EIS). That is because the elevated guideway will require no removal of existing travel lanes, while providing an attractive, reliable travel alternative. When traffic slows, or even stops due to congestion or incidents, the elevated rail transit will continue to operate without delay or interruption.

The at-grade light rail, with its continuous tracks in-street will create major impediments to turning movements, many of which would have to be closed to eliminate a serious crash hazard. Even where turning movements are designed to be accommodated, at-grade systems experience significant collision problems. In addition, mixing at-grade fixed guideway vehicles with cars, bicyclists, and pedestrians presents a much higher potential for conflicts compared to grade-separated conditions. Where pedestrian and automobiles cross the tracks in the street network, particularly in areas of high activity (e.g., station areas or intersections) there is a risk of collisions involving trains that does not exist with an elevated system. There is evidence of crashes between trains and cars and trains and pedestrians on other at-grade systems throughout the country. This potential would be especially high in the Chinatown and Downtown neighborhoods, where the number of pedestrians is very high and the aging population presents a particular risk.

- ***Construction Impacts**: Constructing an at-grade rail system could have more effects than an elevated system in a number of ways. The wider and continuous footprint of an at-grade rail system compared to an elevated rail system (which touches the ground only at discrete column foundations, power substations and station accessways) increases the potential of utility conflicts and discovery of sensitive cultural resources. In addition, the extra roadway lanes taken away for the system would result in increased congestion or require that additional businesses or homes be taken to widen the roadway through Downtown. Additionally, the duration of short-term construction impacts to the community and environment with an at-grade system would be considerably greater than with an elevated system. Because of differing construction techniques, more lanes would need to be continuously closed for at-grade construction and the closures would last longer than with elevated construction. This would result in a greater disruption to business and residential access.*

Because it is not feasible for an at-grade system through Downtown to move passengers rapidly and reliably without significant detrimental effects on other transportation system elements (e.g., the highway and pedestrian systems, safety, reliability, etc.), an at-grade system would have a negative system-wide impact that would reduce ridership throughout the system. The at-grade system would not meet the Project's Purpose and Need and, therefore, does not require additional analysis.

Agricultural Land

The detailed discussion of zoning as the key implementing tool to turn land use planning policies into development is presented in the Honolulu High-capacity Transit Corridor Project Land Use Technical Report (RTD 2008b) and summarized in the Final EIS. The technical report can be reviewed at the City and County of Honolulu DTS office or on the Project website at www.honolulutransit.org. The Project is focused on the construction and implementation of rail transit service, and that is what is covered in the Final EIS. However, as mentioned in Section 4.19.2 of the Final EIS, transit-oriented development (TOD) is expected to occur in project station areas as an indirect effect of the Project. The increased mobility and accessibility that the Project may provide will also increase the desirability and value of properties near the stations, thereby attracting new real estate investment nearby (in the form of TOD). In March 2009, the City Council approved and the Mayor of Honolulu signed Bill 10 (2008) (Ordinance 09-4), which defines the City's approach to TOD around fixed guideway stations. New zoning regulations will address parking standards, new density provisions, open space, and affordable housing. Financial incentives could include public-private partnerships, real property tax credits, and infrastructure financing. While the Project is coordinating with City and State agencies to encourage development of enhanced pedestrian and bicycle facilities and other land use changes near stations, the actual construction of such facilities and zoning changes are beyond the scope of the Project. The special districts also encourage public input into the design of TOD neighborhood plans to reflect unique community identities.

As stated in Section 4.2.3, Environmental Consequences and Mitigation [Lane Use], of this Final EIS, the only farmlands that will be acquired for the Project are in the Ewa Plain. The Ewa Development Plan designates areas for dense development while preserving other areas for agriculture. A maximum of 80 acres of prime farmland and 8 acres of statewide-important farmlands will be acquired by the Project, of which 70 acres are actively cultivated. All of the affected properties designated as prime, unique, or of statewide importance and/or actively farmed are owned by individuals, corporations, or agencies that plan to develop them in conformance with the Ewa Development Plan.

One of the two alternatives for a maintenance and storage facility is in agricultural-related use (Aloun Farms). The other potential maintenance and storage facility is located near Leeward Community College and is the site of a former Navy fuel storage and delivery facility. The Leeward Community College location is the preferred location for the maintenance and storage facility, and the City has been working with the Navy to acquire it. If the Project can acquire this site, only about 47 acres of agricultural land designated prime or of statewide importance will be used for the Project.

The displacement of agricultural lands as a result of the Project represents less than one-tenth of one percent of available agricultural land. The Project's effect will not be substantial and no mitigation will be required.

The Waipahu area does not provide an available location for park-and-ride facilities to serve Ewa and Waianae traffic. Also, buses would be required to access the terminal station through congested traffic on Farrington Highway. The savings from shortening the Ewa limit of

the project corridor would not be sufficient to connect UH Manoa and Waikiki and would result in substantial traffic impacts in the Waipahu area. The Project serves areas within the Urban Growth Boundary defined by the Ewa Development Plan. By supporting development within the Urban Growth Boundary, further development pressure outside of the boundary will be reduced.

Air Quality

The regional pollutant burdens estimated in Table 4-15, 2030 Mobile Source Regional Transportation Pollutant Burdens, of the Final EIS are based on VMT and VHT estimates throughout the study area. These estimates are based on regional planning models approved for use by the appropriate agencies. Emission rates are developed through the use of EPA's MOBILE6.2 Emission Factor program which takes into account vehicle mix, speed, meteorological conditions of the study area, and vehicular registration information. The Regional VMT model is reviewed by the State agencies for accuracy. MOBILE6.2 is EPA's model of choice for mobile source emission factor estimates.

The results shown in Table 4-15 of the Final EIS reflect mobile source emission burdens. As stated in the text, additional emissions will be generated due to the power requirements of the fixed guideway system. Table 4-21 indicates that the Project would require 2 percent less overall energy as compared to the No Build Alternative. The Project is expected to result in decreased emissions generated on the roadways along with an increase in power source emissions resulting from fixed guideway energy consumption; however, the overall emission level for the Project is expected to be lower than the No Build Alternative because of reduced traffic congestion compared to the No Build Alternative.

In general, per capita emissions from rail transit are less than a third of those from the automobile. VMT is simply the sum of the length of all highway segments multiplied by the number of vehicles that travel on them over the course of a day. The travel forecasting model performs that calculation each time the model is run. The differences in VMT between alternatives in the analyses are based on the differences in the numbers generated by the model. The same is generally true for VHT and VHD. VMT, VHT, and VHD forecasts have been developed using the travel demand model, which was calibrated and validated to current year conditions. The model is based upon a set of realistic input assumptions regarding land use and demographic changes between now and 2030 and expected transportation levels-of-service on both the highway and public transit system.

Energy

The Project will rely on HECO's existing grid to provide propulsion for the trains and system operations for the trains. HECO is moving toward renewable energy generation. As that happens, the fixed guideway will also benefit from such new sources of energy. The 21 proposed stations and maintenance and storage facility will, to the extent possible, incorporate energy efficiency, alternative energy technologies, and other sustainable features into the design. This is being accomplished by including sustainability design criteria into the contract documents for the Project. Combined with the State's commitment to renewable electricity production, the system will substantially reduce the consumption of petroleum. Transportation

energy use is evaluated in Section 4.11, Energy and Electric and Magnetic Fields, of this Final EIS.

As shown in Section 4.11, Energy and Electric and Magnetic Fields, of this Final EIS, the Project will result in reduced transportation energy consumption on Oahu. As stated previously, for at-grade operation, the system would require a fenced right-of-way with no crossings. It is not possible to construct such a system in many parts of the corridor, such as in the Downtown area.

Chapter 3 of the Final EIS details the operation of the transportation system, including vehicle miles traveled and ridership for the Project.

Margins of Error

The preparation of the Draft and Final EISs follows the requirements of the Federal process established by NEPA, as applied by the FTA, and Chapter 343 of the Hawaii Revised Statutes. Further detail is available in the supporting technical reports for each of the discipline areas. Specific margins of error are not available, nor are they prescribed by U.S. DOT guidance on environmental analysis.

Cost

Chapter 6 of the Final EIS notes that fares are already subsidized for TheBus and are assumed to be for the Project. This is a typical practice for most transit systems throughout the country. The City Council's current policy is to recover between 27 and 33 percent of the annual cost of operations and maintenance from fares. It applies to all users, although reduced-cost fare categories are available to select groups, such as seniors and students.

Chapter 6 of the Final EIS notes that the capital costs of the Project will be paid for using the County General Excise Tax Surcharge authorized by the State Legislature and approved by the City Council and Federal funding from the Federal Transit Administration. Farebox revenues are generally used to pay for ongoing operating and maintenance of the system.

The City Council's current policy is that 27 to 33 percent of operating and maintenance costs be recovered from farebox collections. As costs change, the City Council will adjust fares to meet that requirement. That means fares could rise or fall depending on conditions.

The FTA and DTS appreciate your interest in the Project. The Final EIS, a copy of which is included in the enclosed DVD, has been issued in conjunction with the distribution of this letter. Issuance of the Record of Decision under NEPA and acceptance of the Final EIS by the Governor of the State of Hawaii are the next anticipated actions and will conclude the environmental review process for this Project.

Very truly yours,

WAYNE Y. YOSHIOKA
Director

Enclosure